

## 1. THE FOLLOWING SHOULD ALWAYS BE OBSERVED FOR SAFETY

- Please provide an exclusive circuit for the air conditioner and do not connect other electrical appliances to it.
- Be sure to read "THE FOLLOWING SHOULD ALWAYS BE OBSERVED FOR SAFETY" before installing the air conditioner.
- Be sure to observe the cautions specified here as they include important items related to safety.
- The indications and meanings are as follows.

### WARNING

- Could lead to death, serious injury, etc.

### CAUTION

- Could lead to serious injury in particular environments when operated incorrectly.

- After reading this manual, be sure to keep it together with the OPERATING INSTRUCTIONS in a handy place on the customer's site.

### WARNING

- Do not install the unit by yourself (customer). Incomplete installation could cause injury due to fire, electric shock, the unit falling or leakage of water. Consult the dealer from whom you purchased the unit or special installer.

- Install the unit securely in a place which can bear the weight of the unit. When installed in an insufficient strong place, the unit could fall causing injury.
- Use the specified wires to connect the indoor and outdoor units securely and attach the wires firmly to the terminal block connecting sections so the stress of the wires is not applied to the sections.

- Do not use intermediate connection of the power cord or the extension cord and do not connect many devices to one AC outlet.

- It could cause a fire or an electric shock due to electrical contact, defective insulation, exceeding the permissible current, etc.

- Check that the refrigerant gas do not leak after installation has completed.

- If refrigerant gas leaks indoors, and comes into contact with the fire of a fan heater, space heater, stove, etc., harmful substances will be generated.

- Perform the installation securely referring to the installation manual. Incomplete installation could cause a personal injury due to fire, electric shock, the unit falling or leakage of water.

- Perform electrical work according to the installation manual and be sure to use an exclusive circuit.

- If the capacity of the power circuit is insufficient or there is incomplete electrical work, it could result in a fire or an electric shock.

- Attach the electrical cover to the indoor unit and the service panel to the outdoor unit securely.

- If the electrical cover in the indoor unit and/or the service panel in the outdoor unit are not attached securely, it could result in a fire or an electric shock due to dust, water, etc.

- Be sure to use the part provided or specified parts for the installation work.

- The use of defective parts could cause an injury or leakage of water due to a fire, an electric shock, the unit falling, etc.

- Be sure to cut off the main power in case of setting up the indoor electronic control P.C. board or wiring works.

- It could cause an electric shock.

- The appliance shall be installed in accordance with national wiring regulations.

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## 3. INSTALLATION DIAGRAM & ACCESSORIES

### FLARED CONNECTIONS

This unit has flared connections on both indoor and outdoor sides.

- Remove the outdoor units valve cover, then connect the pipes.
- Refrigerant pipes are used to connect the indoor and outdoor units.
- Be careful not to crush or bend the pipe in pipe bending.

### Limits

Pipe length	20 m max.
Height difference	12 m max.
No. of bends	10 max.

- Refrigerant adjustment... If pipe length exceeds 7 m, additional refrigerant (R410A) charge is required. (The outdoor unit is charged with refrigerant for pipe length up to 7 m.)

Pipe length	Up to 7 m	No additional charge is required.
	Exceeding 7 m	Additional charge is required. (Refer to the table below.)

Refrigerant to be added	30 g/m × (refrigerant piping length (m) - 5)
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### ACCESSORIES

Check the following parts before installation.

<Indoor unit>

Installation plate	1
Installation plate fixing screw (4 × 25 mm)	7
Remote controller holder	1
Fixing screw for (3.5 × 16 mm (Black))	2
Battery (AAA) for remote controller	2
Wireless remote controller	1
Felt tape (Used for left or left-rear piping)	1
Air cleaning filter	2

<Outdoor unit: For VV type only>

Drain socket	1
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### PART TO BE PROVIDED AT YOUR SITE

Optional extension pipe

Indoor/outdoor unit connecting wire (4-core 1.0 mm <sup>2</sup> )	1
Extension pipe	1
Wall hole sleeve	1
Wall hole cover	1
Pipe fixing band (The quantity depends on the pipe length)	2 to 5
Fixing screw for (φ > 20 mm (The quantity depends on the pipe length))	2 to 5
Piping tape	1
Putty	1
Drain hose (or soft PVC hose, 15 mm inner dia. or hard PVC pipe VP16)	1 or 2
Refrigeration oil	1

Note:

- When operating the air conditioner in low outside temperature, be sure to follow the instructions described below.
- Never install the outdoor unit in a place where its inlet/outlet side may be exposed directly to wind.
- To prevent exposure to wind, install the outdoor unit with its inlet side facing the wall.
- To prevent exposure to wind, it is recommended to install a baffle board on the air outlet side of the outdoor unit.

Units should be installed by licensed contractor according to local code requirement.

Basically open 80 mm or more without any obstruction in front and on both sides of the unit.

When the piping is to be attached to a wall containing metal (in plaster or metal netting), use a chemically treated wooden pipe 20 mm or thicker between the wall and the piping or use 8 mm thickness insulation vinyl tape around the piping.

8 mm thickness thermal insulation plastic.

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## 4. INDOOR UNIT INSTALLATION

### 4-1 FIXING OF INSTALLATION PLATE

- Find a structural material (such as a stud) in the wall and fix installation plate horizontally.

Bind the line to the center hole.

79 mm or more  
109 mm or more for left and left-back piping (using spacer)

190 mm or more (left wall)

Installation plate fixing screw (4 × 25 mm)

Plumb

Align the plumb line with the mark "V".

182 mm or more (left wall)

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## 4-3 POWER SUPPLY AND CONNECTING WIRE SPECIFICATIONS

- Use special room air conditioning circuit.

Power supply cord length (Lead to left/Lead to right) 0.3 m/1 m

Indoor/outdoor unit connecting wire Specification Cable 4-core 1.0 mm<sup>2</sup>, in conformity with Design 245 IEC 57.

- Take out power supply cord from the left or right bottom corner of the indoor unit.

Connect to the power switch which has a gap of 3 mm or more when open to interrupt the source power phase. (When the power switch is shut off, it must interrupt all phases.) (Rated Voltage/Frequency: 220 V/50 Hz) (Input capacity Main switch/Fuse:10 A) (This plug has to be one meets the Standards.)

Power supply cord

Blue : N  
Brown : L

Never cut the indoor and outdoor unit connecting wire and connect to other wires. It may cause a fire.

Do not bundle the spare wire, but put it as shown below.

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